

<b>NOTICE</b> – Your report to the Census Bureau is <b>confidential</b> by law (Title 13, U.S. Code). It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.		<b>CENSUS USE ONLY</b>	<div style="display: flex; justify-content: space-between;"> <div>           FORM <b>RD-1</b> (12-22-99)         </div> <div style="text-align: right;">           U.S. DEPARTMENT OF COMMERCE U.S. CENSUS BUREAU COLLECTING AND COMPILING AGENT FOR <b>THE NATIONAL SCIENCE FOUNDATION</b> </div> </div> <div style="text-align: center; margin-top: 10px;"> <b>SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT DURING 1999</b> </div> <div style="margin-top: 10px;">           In correspondence pertaining to this report refer to this <b>CENSUS FILE NUMBER (11 digits)</b> <span style="font-size: 1.5em;">▶</span> </div>		
<b>RETURN TO</b>	SURVEY CODE  <b>4001</b>				
	INDUSTRY CODE				
	WEIGHT				
	STATE				
	ADDRESS				
Name of person who supplied 1998 data		SIC CODE			
<b>MANDATORY REPORTING REQUIREMENTS</b>  Data supplied in items 1A and 1B and in item 3A, line 3, columns 4 and 6, for 1999 on this form will satisfy the mandatory reporting requirements. (Title 13, U.S. Code.)  PLEASE READ ENCLOSED INSTRUCTIONS BEFORE COMPLETING THIS FORM.					

(Please correct any error in name and address, including ZIP Code.)

**THIS REPORT SHOULD COVER YOUR ENTIRE CONSOLIDATED DOMESTIC ENTERPRISE, INCLUDING ALL U.S. SUBSIDIARIES AND DIVISIONS.**

The term "company" on this form refers to the consolidated domestic enterprise.

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Please complete this form by the date printed at the top of this page and return it in the envelope provided. Make a copy for your records.</li> <li>• Please read the enclosed instructions before completing this form.</li> </ul> | <ul style="list-style-type: none"> <li>• Report figures in thousands of dollars. Reasonable estimates are acceptable.</li> <li>• Explain significant changes in year-to-year data in the remarks section.</li> </ul> |
|---|--|

**COVERAGE REVIEW**

Was this company owned or controlled by another company on December 31, 1999?

 1303 ☐ Yes – See instructions for Coverage Review.

 1304 ☐ No – Continue with item 1

**Section I – GENERAL COMPANY DATA**

<b>Item 1 – RECEIPTS AND EMPLOYMENT FOR THE COMPANY</b>  <b>A.</b> Sales, operating receipts and revenues from all domestic operations of the company, net of returns and allowances. (Report in thousands of dollars) EXCLUDE domestic intra-company transfers and sales by foreign subsidiaries. INCLUDE receipts for sales of products and services provided to other companies, individuals, U.S. Government agencies, and foreign countries.	<b>Item 2 – NUMBER OF RESEARCH AND DEVELOPMENT SCIENTISTS AND ENGINEERS</b> Apportion on a full-time equivalent basis. See page 4 of the instruction booklet for more detail.																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">1998</th> <th colspan="3">1999</th> </tr> <tr> <th>Bil.</th> <th>Mil.</th> <th>Thou.</th> <th>Bil.</th> <th>Mil.</th> <th>Thou.</th> </tr> </thead> <tbody> <tr> <td>101</td> <td></td> <td></td> <td>102</td> <td></td> <td></td> </tr> </tbody> </table>	1998			1999			Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	101			102			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>January 1999</th> <th>January 2000</th> </tr> <tr> <th>Number</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>503</td> <td>504</td> </tr> <tr> <td>505</td> <td>506</td> </tr> <tr> <td>501</td> <td>502</td> </tr> </tbody> </table>	January 1999	January 2000	Number	Number	503	504	505	506	501	502
1998			1999																										
Bil.	Mil.	Thou.	Bil.	Mil.	Thou.																								
101			102																										
January 1999	January 2000																												
Number	Number																												
503	504																												
505	506																												
501	502																												
<b>B.</b> Domestic company employment in all activities during the pay period which includes the 12th of March 1999 (Item 1 of I.R.S. Form 941, if one Form 941 was filled for the entire company.)	<b>A.</b> Federal research and development  <b>B.</b> Company and other research and development  <b>C. TOTAL – Sum of lines 2A and 2B</b> <span style="font-size: 1.5em;">➔</span>																												

PLEASE CONTINUE ON REVERSE.

## Section I - GENERAL COMPANY DATA - Continued

Item 3 - COSTS INCURRED FOR RESEARCH AND DEVELOPMENT (Report in thousands of dollars)			1998									1999								
			Federal funds (1)			Company and other (2)			Total ((1)+(2)) (3)			Federal funds (4)			Company and other (5)			Total ((4)+(5)) (6)		
			Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
			301			302			303			304			305			306		
<b>A. Performed within the company</b>																				
1. Basic research																				
2. Applied research and development	a. Applied research		311			312			313			314			315			316		
			321			322			323			324			325			326		
			331			332			333			334			335			336		
		c. Total - Sum of lines a and b																		
3. Total - Sum of lines 1 and 2.c.			341			342			343			344			345			346		
<b>B. Outside the company - Federal funds and company funds for research and development performed by others outside the company within the United States (Exclude from 3A.3. above)</b>			351			352			353			354			355			356		
<b>C. Foreign - Company funds for research and development performed by foreign subsidiaries or other organizations outside the United States (Exclude from 3A.3. and 3B. above)</b>						362								365						
<b>D. TOTAL - Company and other funds, except Federal (This line represents company sponsored research and development with the exception of "other funds.") - Sum of 3A.3, B, and C, (column 5) →</b>						372								375						
<b>Item 4 - COMPANY AND OTHER FUNDS, EXCEPT FEDERAL, FOR RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BUDGETED FOR THE YEAR 2000</b>															2000					
															Bil.	Mil.	Thou.			
															401					
(Comparable to the 1999 figure reported in Item 3A.3., column (5).)																				

## Section II - RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY

Item 5 - COSTS INCURRED FOR FEDERAL RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY PRINCIPAL GOVERNMENT AGENCY								Item 6 - COSTS INCURRED FOR RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY MAJOR TYPE OF EXPENSE							
Allocate the total reported in Item 3A., line 3, column (4), Federal funds, into the following principal agencies:								Allocate the total reported in Item 3A., line 3, column (6), total company research and development - Exclude lines 3B. and 3C.							
Key code		1998 (1)			1999 (2)			Key code		1998 (1)			1999 (2)		
5		Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	6		Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
1. Department of Defense		01						1. Wages and salaries of research and development personnel - Include scientists and engineers, technicians, secretaries, and other personnel.		01					
2. National Aeronautics and Space Administration		02						2. Costs of materials and supplies consumed - Do not include in this item components, models, and other materials supplied by other research organizations.		02					
3. Department of Energy		03						3. R & D depreciation		05					
4. Other Federal agencies		04						4. Other costs - Include service and supporting costs, and share of overhead.		03					
5. TOTAL COSTS - Sum of lines 1 through 4 →		05						5. TOTAL COSTS - Sum of lines 1 through 4 →		04					

FORM **RD-1 (Item 7)**  
(12-22-99)**SURVEY OF INDUSTRIAL RESEARCH  
AND DEVELOPMENT DURING 1999**U.S. DEPARTMENT OF COMMERCE  
U.S. CENSUS BUREAU  
COLLECTING AND COMPILING AGENT FOR  
THE NATIONAL SCIENCE FOUNDATION**Refer to this CENSUS  
FILE NUMBER in any  
correspondence  
pertaining to this report****Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued****Item 7 — COST OF RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY STATE**

Allocate the total reported in Item 3.A., line 3, columns (4) and (6), by the States in which your various research and development laboratories or facilities are located. Estimate the costs associated with each State. If necessary, you may report up to 10 percent of your total as "Not distributed by State."

Key code  9	State	1998						1999						Key code  9	State	1998						1999						
		Federal funds			Total funds			Federal funds			Total funds					Federal funds			Total funds			Federal funds			Total funds			
		(1)			(2)			(1)			(2)					(1)			(2)			(1)			(2)			
		Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou			Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	
01	AL													27	MT													
02	AK													28	NE													
03	AZ													29	NV													
04	AR													30	NH													
05	CA													31	NJ													
06	CO													32	NM													
07	CT													33	NY													
08	DE													34	NC													
09	DC													35	ND													
10	FL													36	OH													
11	GA													37	OK													
12	HI													38	OR													
13	ID													39	PA													
14	IL													40	RI													
15	IN													41	SC													
16	IA													42	SD													
17	KS													43	TN													
18	KY													44	TX													
19	LA													45	UT													
20	ME													46	VT													
21	MD													47	VA													
22	MA													48	WA													
23	MI													49	WV													
24	MN													50	WI													
25	MS													51	WY													
26	MO													52	*													
53	<b>TOTAL COSTS — Sum of lines 1 through 52</b>													953														

PLEASE CONTINUE ON REVERSE.

## Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued

### Item 8 — ENERGY RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY

• Report expenditures for energy research and development by type of energy sources. Include the project cost or portion of project cost incurred for the purpose of increasing energy resources or capabilities. These expenditures should be included in Item 3.A., line 3, columns (4) and (6).

• Estimate expenditures for energy research by energy source for 2000.

	Key code	1998						1999						2000					
		Federal funds			Total funds			Federal funds			Total funds			Projected Federal funds			Projected total funds		
		(1)			(2)			(1)			(2)			(3)			(4)		
	10	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
A. Nuclear	03																		
B. Fossil fuels	12																		
C. Geothermal, solar, conservation and utilization	16																		
D. All other energy	17																		
E. TOTAL — Sum of lines A through D	18																		

## Section III — RESEARCH AND DEVELOPMENT PERFORMED OUTSIDE THE DOMESTIC COMPANY WITH COMPANY FUNDS

### Item 9 — FOREIGN RESEARCH AND DEVELOPMENT BY COUNTRY

Report the amount of total foreign research and development, Item 3.C., column (5), for the countries with the largest expenditures. If necessary, write in countries not listed. Report the balance of foreign research and development on line 9.

	Key code	1998 (1)			1999 (2)		
		Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
1. Canada	01						
2. Germany	02						
3. France	03						
4. Japan	04						
5. United Kingdom	05						
6. Puerto Rico	06						
7. Other — Specify	07						
8. Other — Specify	08						
9. Balance not distributed	09						
10. TOTAL — Sum of lines 1 through 9	10						

### Item 10 — COVERAGE AND OPERATIONAL STATUS

Are research and development expenditures for the entire domestic enterprise, including subsidiaries, reported on this form?

1301 ☐ Yes    1302 ☐ No — Please explain in the "Remarks" section below

### Item 11 — CERTIFICATION — This report is substantially accurate and has been prepared in accordance with instructions

Name of person to contact regarding this report		Telephone	Area code	Number	Extension
Signature of authorized official		Title			701 Date
801 Remarks					